

IN THE SPECIFICATION:

Please amend the specification as follows:

Please replace the paragraph beginning on page 31, line 17, and ending on page 31, line 30, which begins with the phrase "Membrane mediated PCR based amplification of polynucleotides", with the following paragraph:

Membrane mediated PCR based amplification of polynucleotides was accomplished on a small pore size nanofibrous membrane. Prior to use, the membrane was treated by polymer molecules including cellulose derivatives, polyethyleneoxide, polyethyleneglycol, polyvinyl-pyrrolidone, polyacrylamide, polyvinylalcohol, dextrans, proteins (such as BSA), DNA, and complex carbohydrates to avoid adsorption of the polymerase enzyme or other particular components of the reaction mixture to the large surface area. A 101 bp fragment of the pUC 19 cloning vector (template DNA) was amplified. The reaction mixture contained 200 μ M dNTP, 1.5 mM $MgCl_2$, 0.05 U/ μ l Taq polymerase, 0.5 ng/ μ l pUC 19 DNA and 0.5 μ M of each primers (forward primer: 5' GTA AAA CGA CGG CCA GTG 3' (SEQ ID NO:1), reverse primer: 5 'GGA AAC AGC TAT GAC CAT G 3' (SEQ ID NO:2)) in a total volume of 10 μ l. The pUC 19 template was mixed with the primers, the Taq polymerase enzyme, relevant nucleotide triphosphates and buffer components and delivered onto the surface of a pretreated nanoporous structure in the form of a membrane.

Please add the Sequence Listing enclosed herewith on a separate page at the end of the application.

GENUS RESTRICTION

The claims have been restricted into the following groups of inventions:

<u>Groups</u>	<u>Claims</u>	<u>Subject Matter</u>
I	1-8, 11-19	a method to produce a nanoporous product.
II	9-10	a method to measure kinetics, i.e., analysis.
III	20-21 and 25	a method to analyze a product.
IV	22-24	a method to preserve a product.
V	26-29	a multiple step method to produce a product.
VI	30-33	a system, i.e., an apparatus to react components and analyze product formed.

SPECIES RESTRICTION

The claims of Group I have been further restricted into the following groups of species:

- (a) adjust diffusion rate, material characteristics or other from those in Claim 8;
- (b) among one: enzymes, metal complexes, or platinum as listed in claim 12;
- (c) one enzyme among those listed in claim 13; and
- (d) one biological component other than enzyme as listed in claim 16; or one product among those in claim 17; or one cleavage product among those listed in claim 18.

Application Serial No.: 10/047,438

APPLICANTS' ELECTIONS

Applicants hereby elect the invention of Group I, claims 1-8 and 11-19, drawn to a method to produce a nanoporous product, for prosecution at this time.

Applicants hereby also elect the species within Group I as required upon which to begin a search of the art:

- (a) adjust rate diffusion;
- (b) enzymes;
- (c) restriction enzymes; and
- (d) nucleic acid.